

IN THE CLAIMS

Claims 1-27 were previously cancelled. Claims 28 is currently amended. Claims 29, 31, 40, 41 and 54 are currently cancelled. Claims 30, 32-40 and 42-53 are withdrawn, all as follows:

Claims 1-27 (Cancelled)

28. (Currently Amended) A wheel folding apparatus comprising:

 a transport cylinder adapted to receive and to transport at least one web of material, said transport cylinder having a circumferential surface and a circumferential direction.

 first and second folding rollers associated with said transport cylinder and defining a folding gap;

 a first transverse cutting assembly ~~counter cylinder~~ cooperating with said transport cylinder and forming ~~defining~~ a first cutting gap with ~~with~~ said transport cylinder, said first transverse cutting assembly including a first cutting cylinder provided with at least one first cutting cylinder cutting blade, said first cutting gap defining a first conveying path for passage of a first web of material to be cut;

 a second transverse cutting assembly ~~counter cylinder~~ cooperating with said transport cylinder and forming ~~defining~~ a second cutting gap with ~~with~~ said transport cylinder, said second transverse cutting assembly including a second cutting cylinder provided with at least one second cutting cylinder cutting blade, said second cutting gap defining a second conveying path for passage of the first web of material and a second web of material to be cut; and

a plurality of cutting blades engaging backstops means on said circumferential surface of said transport cylinder and spaced in said circumferential direction of said transport cylinder said first and second transverse cutting assemblies being arranged offset from each other in said circumferential direction of said transport cylinder, said at least one first cutting cylinder cutting blade cutting a first signature off the first web in the course of passage of said at least one first cutting cylinder cutting blade through said first cutting gap, said at least one second cutting cylinder cutting blade cutting a second signature off the second web during passage of said at least one second cutting cylinder cutting blade through said second cutting gap, said first and second conveying paths meeting on said transport cylinder, said first and second cutting gaps being located before, in said transport cylinder circumferential direction, said first and second folding rollers, said folding gap receiving said at least one first signature and said at least one second signature counter cylinder to transversely cut said at least one web of material.

29. (Cancelled)

30. (Withdrawn) The wheel folding apparatus of claim 2829 further including stops on said transport cylinder and cooperating with said cutting blades cutters on said first and second cutting cylinders.

31. (Cancelled)

32. (Withdrawn) The wheel folding apparatus of claim 28 wherein said first and second cutting counter-cylinders are arranged sequentially on said circumferential surface ~~a circumference~~ of said transport cylinder for phase-shifted cutting of said at least one web of material.

33. (Withdrawn) The wheel folding apparatus of claim 32 wherein a cut performed in said first cutting gap and a cut performed in said second cutting gap are spaced by less than 10 mm.

34. (Currently Amended) The wheel folding apparatus of claim 28 wherein said first and second cutting counter-cylinders are arranged on said transport cylinder offset in said a-circumferential direction of said transport cylinder.

35. (Withdrawn) The wheel folding apparatus of claim 2829 including a first conveying path ~~transport track~~ for the ~~a~~ first web of material and ~~extending through~~ said ~~first cutting gap~~, ~~said first cutting cylinder cutting a first signature of said first web during passage of said first web of material through said first cutting gap~~, and further including a said second conveying parts ~~transport track~~ for the ~~a~~ second web of material meet, ~~said second transport track meeting said first transport track before~~ ~~said second cutting gap~~, ~~said second cutting cylinder cutting a second signature off said second web in said second cutting group during passage of said first and second webs of material through said second cutting gap~~.

36. (Withdrawn) The wheel folding apparatus of claim 35 wherein rotation of said first cutting cylinder and said second cutting cylinder are synchronized whereby said second cutting cylinder cutting blade cutter is received in a cut made in the said first web of material made by said first cutting cylinder cutting blade cutter in said first cutting gap.

37. (Withdrawn) The wheel folding apparatus of claim 36 further including means on said transport cylinder adapted to separate leading and trailing edges of successive ones of said signatures cut in said first cutting gap from the said first web of material.

38. (Withdrawn) The wheel folding apparatus of claim 37 wherein said separating means include signature leading end holding means adapted to shift said signature leading ends opposite to a signature transport direction prior to passage of said signatures through said second cutting gap.

39. (Withdrawn) The wheel folding apparatus of claim 38 wherein said separating means further includes a signature leading end holding means adapted to shift said second signature in said signature transport direction after passage through said second cutting gap.

40. (Cancelled)

41. (Cancelled)

42. (Withdrawn) The wheel folding apparatus of claim 28 wherein said 40 further including a first conveying path transport track of the a-first web of material to be cut, and extending through said first cutting gap, and said a-second conveying path transport track of the a-second web of material to be cut, which meets said first conveying path transport track prior to said second cutting gap, both of said first and second conveying paths transport tracks extending through said second cutting gap.

43. (Withdrawn) The wheel folding apparatus of claim 28 further including at least a first cutter on said transport cylinder, a stop on said first counter cylinder adapted to cooperate with said at least first cutter to cut a signature off said at least one web of material, a holding device on said transport cylinder to hold said first cut-signature and at least a first transport track extending around said transport first counter cylinder and extending through said first cutting gap, said first cutting counter cylinder being rotatable with said transport cylinder, said holding device transporting said first cut-off signatures through said first cutting gap.

44. (Withdrawn) The wheel folding apparatus of claim 43 wherein said holding device is a spur strip.

45. (Withdrawn) The wheel folding apparatus of claim 44 wherein said spur strip carries a plurality of spur needles and is supported for rotation by a shaft, said spur needles crossing said a circumference of said transport cylinder at a location which is changeable in accordance with a pivot position of said spur strip.

46. (Withdrawn) The wheel folding apparatus of claim 44 wherein said spur strip supports a plurality of spur needles having needle tips and needle bases and further wherein said spur strip is supported for pivotable movement about a shaft, said spur needle tips being located at a first distance from said shaft, said spur needle bases being located at a second distance from said shaft, said first distance being greater than said second distance.

47. (Withdrawn) The wheel folding apparatus of claim 37 wherein said means for moving apart said cut edges include radially displaceable segments of said transport cylinder and control means for effecting a radially outward movement of said radially displaceable segments after passage through said second cutting gap.

48. (Withdrawn) The wheel folding apparatus of claim 37 wherein said means for moving apart said cut edges include a groove on said transport cylinder and a strip on said second cutting cylinder and adapted to cooperate with said groove.

49. (Withdrawn) The wheel folding apparatus of claim 44 further including at least one spur strip needle receiving groove on said first cutting cylinder.

50. (Withdrawn) The wheel folding apparatus of claim 42 wherein said first conveying path ~~transport track~~ loops around said transport ~~first counter~~ cylinder at an entry to said first cutting gap.

51. (Withdrawn) The wheel folding apparatus of claim 28 wherein said including at least a first cutter on said transport cylinder, a first stop on said first counter cylinder adapted to cooperate with said at least first cutter to cut a signature off said at least one web of material, a first conveying transport path for the said at least first web of material extends and extending through said first cutting gap, and further wherein said a second conveying path transport track for the a second web of material meets and meeting said first conveying path transport track after said first cutting gap, both said first and second conveying paths transport tracks extending through said second cutting gap, said second counter cylinder having a second stop, said second stop cooperating with said cutter on said transport cylinder for cutting a second signature of said second web during passage of said cutter through said second cutting gap.

52. (Withdrawn) The wheel folding apparatus of claim 28 wherein said transport cylinder has at least five transport fields.

53. (Withdrawn) The wheel folding apparatus of claim 28 further including a web inlet associated with each said first and second cutting gap.

54. (Cancelled)